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1. Document ID: US 5916560 A

L1: Entry 1 of 2

File: USPT

Jun 29, 1999

US-PAT-NO: 5916560

DOCUMENT-IDENTIFIER: US 5916560 A

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TITLE: Methods for inhibiting an immune response by blocking the GP39/CD40 and CTLA4/CD28/B7 pathways and compositions for use therewith

DATE-ISSUED: June 29, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP	CODE	COUNTRY
Larsen; Christian P.	Atlanta	GA			
Aruffo; Alejandro A.	Edmonds	WA			
Hollenbaugh; Diane L.	Seattle	WA			
Linsley; Peter S.	Seattle	WA			
Ledbetter; Jeffrey A.	Seattle	WA			
Pearson; Thomas C.	Atlanta	GA			

US-CL-CURRENT: $\underline{424}/\underline{154.1}$; $\underline{424}/\underline{130.1}$, $\underline{424}/\underline{139.1}$, $\underline{424}/\underline{143.1}$, $\underline{424}/\underline{153.1}$, $\underline{424}/\underline{173.1}$, $\underline{514}/\underline{2}$, $\underline{514}/\underline{8}$, $\underline{530}/\underline{387.3}$, $\underline{530}/\underline{388.73}$, $\underline{530}/\underline{388.75}$

ABSTRACT:

The present invention provides a method for inhibiting an immune reponse and a method for inhibiting rejection of transplanted tissues. This method comprises preventing an endogenous molecule on a cell selected from the group consisting of gp39 and CD40 antigens from binding its endogenous ligand and preventing an endogenous molecule on a cell selected from the group consisting of CTLA4, CD28, and B7 antigens from binding its endogenous ligand. The prevention of such molecules from binding their ligand thereby blocks two independent signal pathways and inhibits the immune response resulting in transplanted tissue rejection.

24 Claims, 36 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 22

Full Title	Citation I	Front R	eviem	Classification	Date	Reference	Caralle 15	Claims	KodC	- Drawe De
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☐ 2. Document ID: US 5869050 A

L1: Entry 2 of 2

File: USPT

Feb 9, 1999

US-PAT-NO: 5869050

DOCUMENT-IDENTIFIER: US 5869050 A

TITLE: Methods of blocking T-cell activation using anti-B7 monoclonal antibodies

DATE-ISSUED: February 9, 1999

INVENTOR-INFORMATION:

NAME

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STATE

ZIP CODE

COUNTRY

de Boer; Mark

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US-CL-CURRENT: 424/156.1; 424/133.1, 424/137.1, 424/141.1, 530/387.1, 530/387.5, 530/388.1, 530/388.85

ABSTRACT:

Methods for causing T cell anergy, treating allograft transplant rejection, treating graft versus host disease, and preventing or treating rheumatoid arthritis are presented, the methods comprising co-administration of a molecule that binds to the B7 antigen and an immunosuppressive agent.

28 Claims, 13 Drawing figures Exemplary Claim Number: 1 Number of Drawing Sheets: 11

Full	Title Citation	Front Review	Classification	Date	Reference			Claims	10MC	Drawe D
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Search 9-21-05



United States Patent [19]

de Boer et al.

Patent Number: [11]

5,869,050

Date of Patent:

*Feb. 9, 1999

[54] METHODS OF BLOCKING T-CELL ACTIVATION USING ANTI-B7 MONOCLONAL ANTIBODIES

[75] Inventors: Mark de Boer, Almere, Netherlands; Leah B. Conroy, Pacifica, Calif.

Assignee: Chiron Corporation, Emeryville, Calif.

[*] Notice: The term of this patent shall not extend beyond the expiration date of Pat. No.

5,425,797.

[21] Appl. No.: 15,147

[22] Filed: Feb. 9, 1993

Related U.S. Application Data

[63]	Continuation-in-part of Ser. No. 910,222, Jul. 9, 1992, Pa No. 5,397,703.	ıt.
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[51]	Int. Cl. ⁶	A61K 39/395; C07K 16/00
[52]	U.S. Cl	424/156.1; 424/137.1
	424/141.1; 424	4/133.1; 530/388.85; 530/387.1
		530/388.1: 530/387.5

[58] Field of Search 530/388.73, 389.6, 530/388.23, 387.1, 388.85, 387.5, 388.1; 424/85.8, 144.1, 133.1, 134.1, 156.1, 137.1,

141.1

[56] References Cited

U.S. PATENT DOCUMENTS

4,683,195	7/1987	Mullis et al
4,683,202	7/1987	Mullis .
4,689,299	8/1987	Insel et al
4,816,567	3/1989	Cabilly et al
4,886,796	12/1989	Eichner et al
4,923,872	5/1990	Kostlan et al
4,946,778	8/1990	Ladner et al 435/69.6
5,068,223	11/1991	Lipsky et al
5,100,899	3/1992	Calne 514/291
5,308,847	5/1994	Calne 514/262
5,330,993	7/1994	Armistead et al 514/330
5,434,131	7/1995	Linsley et al 514/2
		•

FOREIGN PATENT DOCUMENTS

9200092 1/1992 WIPO . WO 96/14865 5/1996 WIPO.

OTHER PUBLICATIONS

Kuplec-Weglinski et al., Synergistic interactions between anti-interleukin 2 receptor mab and CyA in snesitized rat recipients of cardiac allografts, Trans. Proc, vol. 23(1) pp. 285-286,1991.

Tufveson et al., New immunosupressants: testing and development in animals models and the clinic:with special reference to DSG. Immunol. Rev. vol. 136, pp. 110-109, 1993. Cosimi, et al., "Use of Monoclonal Antibodies To T-Cell Subsets for Immunologic Monitoring and Treatment in Recipients of Renal Allografts", The New England Journal of Medicine, 305:308-313 (Aug. 6, 1981).

1992 Physician's Desk Reference at pp. 1217-1218, 1447-1448, 2024-2027 and 2332-2333.

Freeman, et al., "B7, A New Member Of The Ig Superfamily With Unique Expression On Activated And Neoplastic B Cells," 143:2714-2722 (Oct. 15, 1989)

Kriegler, et al., "A Novel Form Of TNF/Cachectin Is A Cell Surface Cytotoxic Transmembrane Protein: Ramifications For The Complex Physiology Of TNF," Cell 53:45-53 (Apr. 8, 1988).

Aruffo, et al., Molecular cloning of a CD28 cDNA by high-efficiency COS cell expression System, Proc. Natl. Acad. Sci. (USA), 84:8573-8577 (Dec., 1987).

Aruffo et al., The Lymphocyte Glycoprotein CD6 Contains a Repeated Domain Structure Characteristic of a New Family of Cell Surface and Secreted Proteins, J.Exp. Med., 174:949-952 (Oct., 1991).

Barneveld, et al., Monoclonal Antibodies against Human β-Glucocerebrosidase, Eur. J. Biochem., 134:585-589 (1983).

Boussiotis, et al., Activated human B lymphocyte express three CTLA-4 counterreceptors that costimulate T-Cell activation, Proc. Natl. Acad. Sci. (USA), 90:11059-11063

Cafiso, et al., Preparation of Unilamellar Lipid Vesicles at 37° C. by Vaporization Methods, Biochem. Biophys. Acta, 649:129-132 (1981).

de Boer, et al., Functional characterization of a novel anti-B7 monoclonal antibody, Eur. J. Immunol., 22:3071-3075 (1992).

de Boer, et al., Generation of monoclonal antibodies to human lymphocyte cell surface antigens using insect cells expressing recombinant proteins, J. Immunol. Methods, 152:15-23 (1992).

Dharakul, et al., Immunization with Baculovirus-Expressed Recombinant Rotavirus Proteins VP1, VP4, VP6, and VP7 Induces CD8+ T Lymphocytes that Mediate Clearance of Chronic Rotavirus Infection in SCID Mice, J. Virol., 65(11:5928-5932 (Nov., 1991).

DiSanto, et al., Generation of anti-human CD8β-specific antibodies using transfectants expressing mixed-species CD8 heterodimers, J. Immunol. Methods, 141:123-131 (1991).

Fleming et al., In situ Expression of a B7-Like Adhesion Molecule on Keratinocytes from Human Epidermis, J. Investigative Dermatology, 101(5):754-758 (Nov., 1993). Fraser, et al., Regulation of Interleukin-2 Gene Enhancer Activity by the T Cell Accessory Molecule CD28, Science, 251:313-316 (Jan. 18, 1991).

Freedman, et al., Selective Induction of B7/BB-1 on Interferon-y Stimulated Monocytes: A Potential Mechanism for Amplification of T Cell Activation through the CD28 Pathway, Cell Immunol. 137:429-437 (1991).

(List continued on next page.)

Primary Examiner-Susan A. Loring Attorney, Agent, or Firm-Donald J. Pochopien; Paul B. Savereide; Robert P. Blackburn

[57] **ABSTRACT**

Methods for causing T cell anergy, treating allograft transplant rejection, treating graft versus host disease, and preventing or treating rheumatoid arthritis are presented, the methods comprising co-administration of a molecule that binds to the B7 antigen and an immunosuppressive agent.

28 Claims, 11 Drawing Sheets